

Publishing MicroStation content to PDF Format

The purpose of this workflow is to provide instructions on how to publish MicroStation/InRoads content to a PDF document.

As of November 2, 2009 Engineering Applications will no longer support direct printing to a hard copy (mylar or paper) from MicroStation. To obtain a hard copy of MicroStation or Inroads content (on a paper, or mylar) users will first have to publish their content to a PDF Document.

Important Terms:

Publishing - The process of converting design content i.e. MicroStation Sheet Models to an electronic document (Typ. PDF).

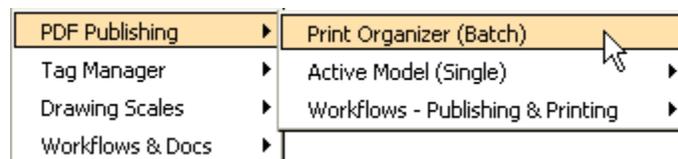
Printing - The process of creating a hard copy on mylar or paper, from an electronic document.

To print a PDF document to the local printer or a plotter, on either paper or mylar “hard copy” see the [“Printing PDF Contract Sheets Guide”](#).

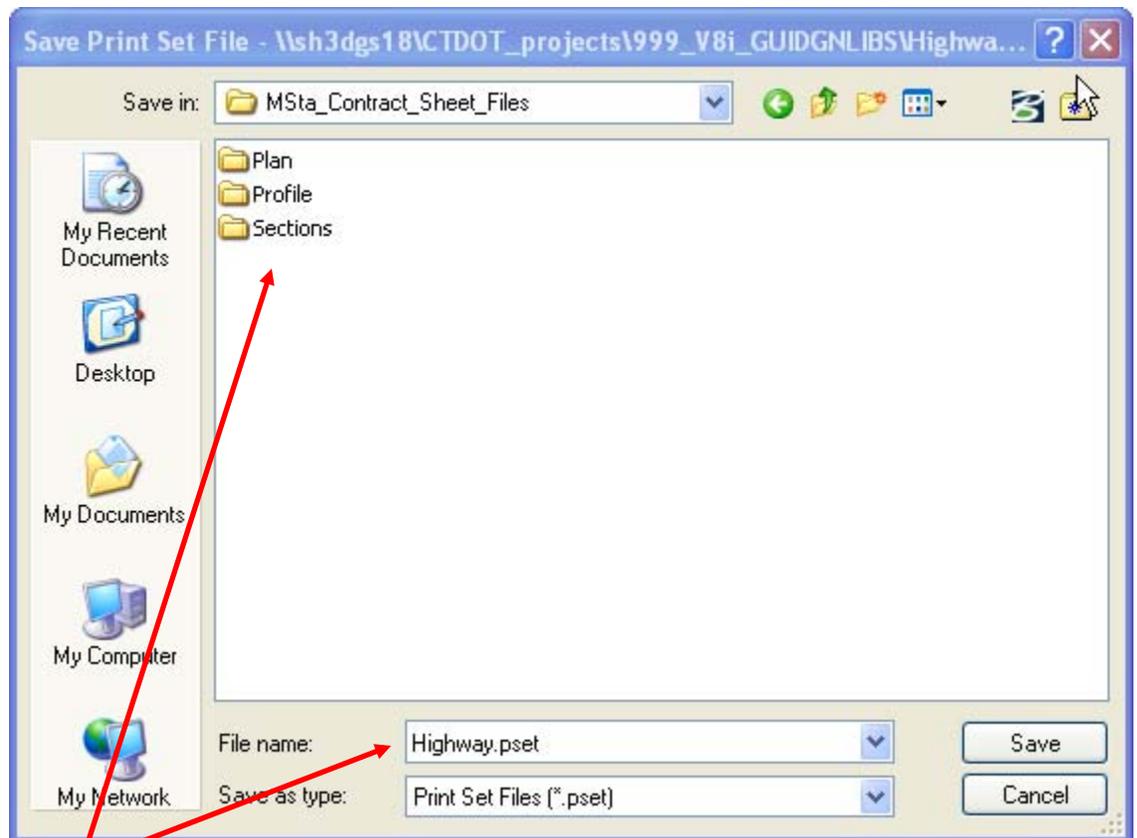
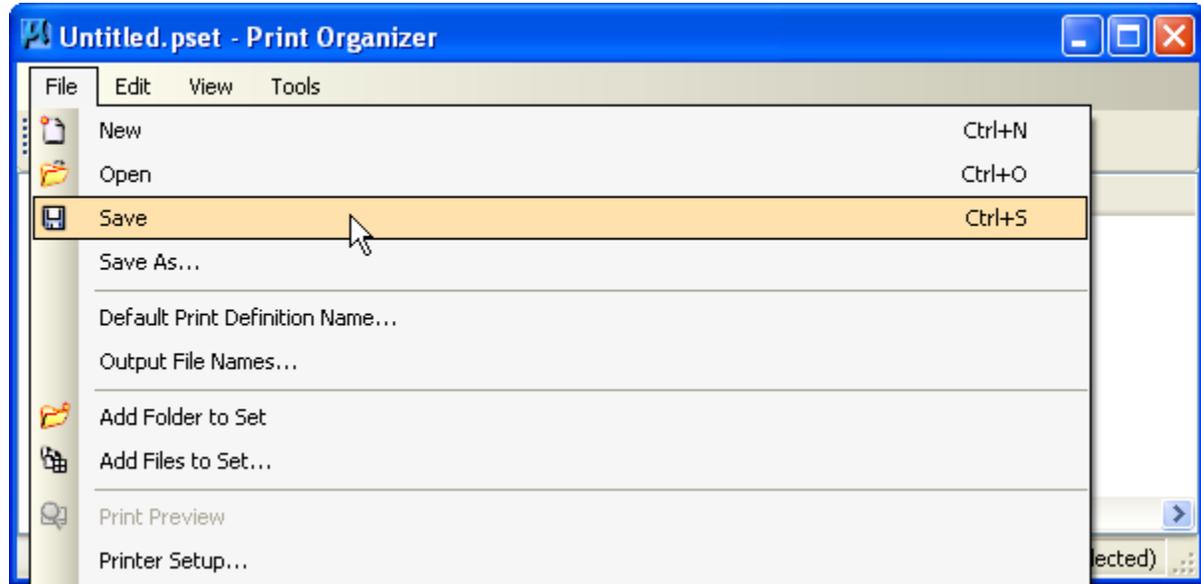
Section 1 Publishing PDF Documents

1.1 Multiple Contract Sheets Models (Batch Publishing)

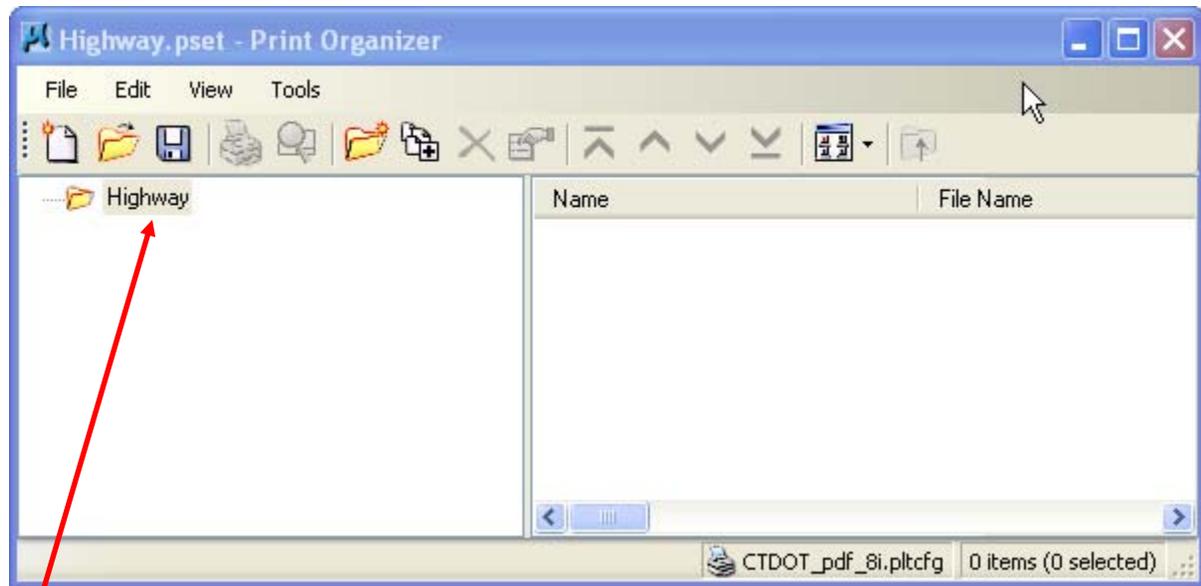
1. In MicroStation open one of the Sheet Models to be published. Models must contain a CTDOT standard size border (24” X 36” 2006 or 22” X 34” 2007).
2. From the drop down menu “*CTDOT 2007 Utilities*” choose the option “*PDF Publishing>Print Organizer (Batch)*”



3. The Print organizer dialog box opens.
4. From the file Drop down menu choose the "SAVE" Option

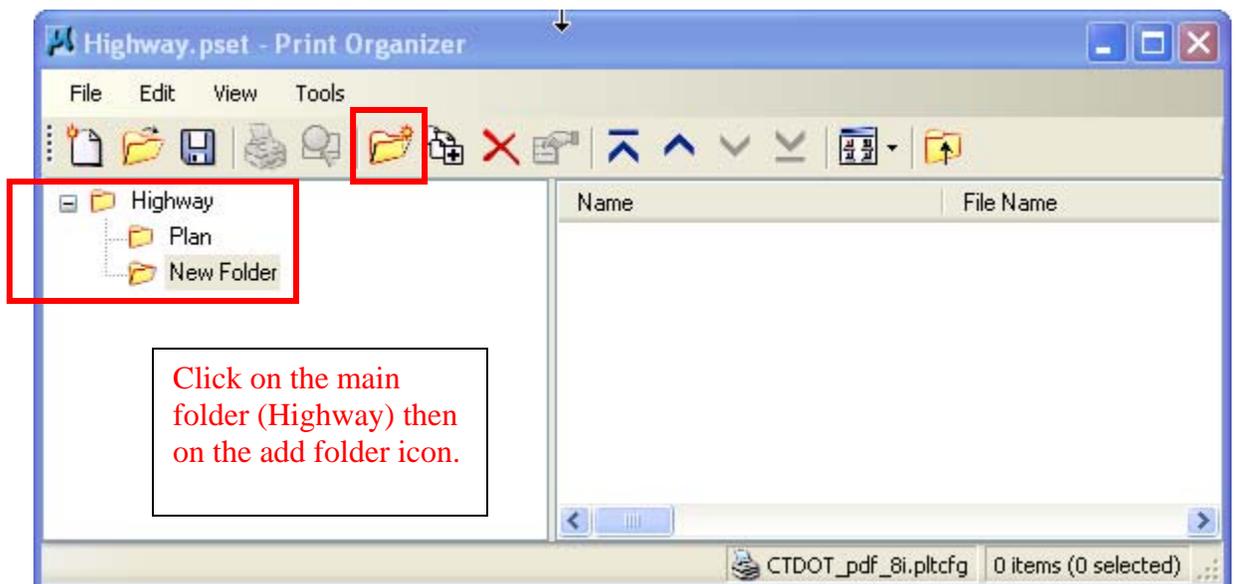


5. Save the pset file in the correct discipline subfolder located within the project container.
6. The file name shall be the discipline name. This example; highway.pset.



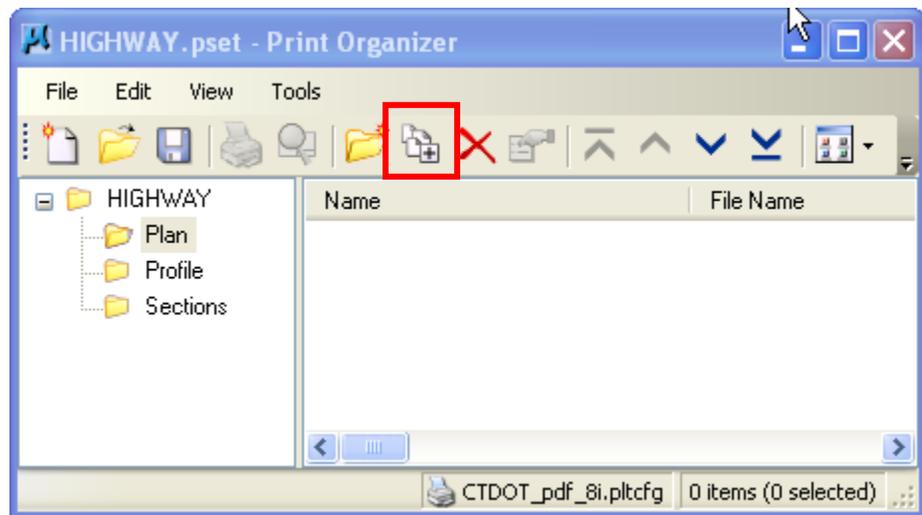
7. Once you click on the save button the lead folder will take on the file name.

Subfolders may be added as necessary. In this example the following subfolders shall be added to the main highway folder; plan, sections, and profile. These subfolders will be passed along to the PDF document as bookmarks, making it very easy to locate a particular file within a PDF file.

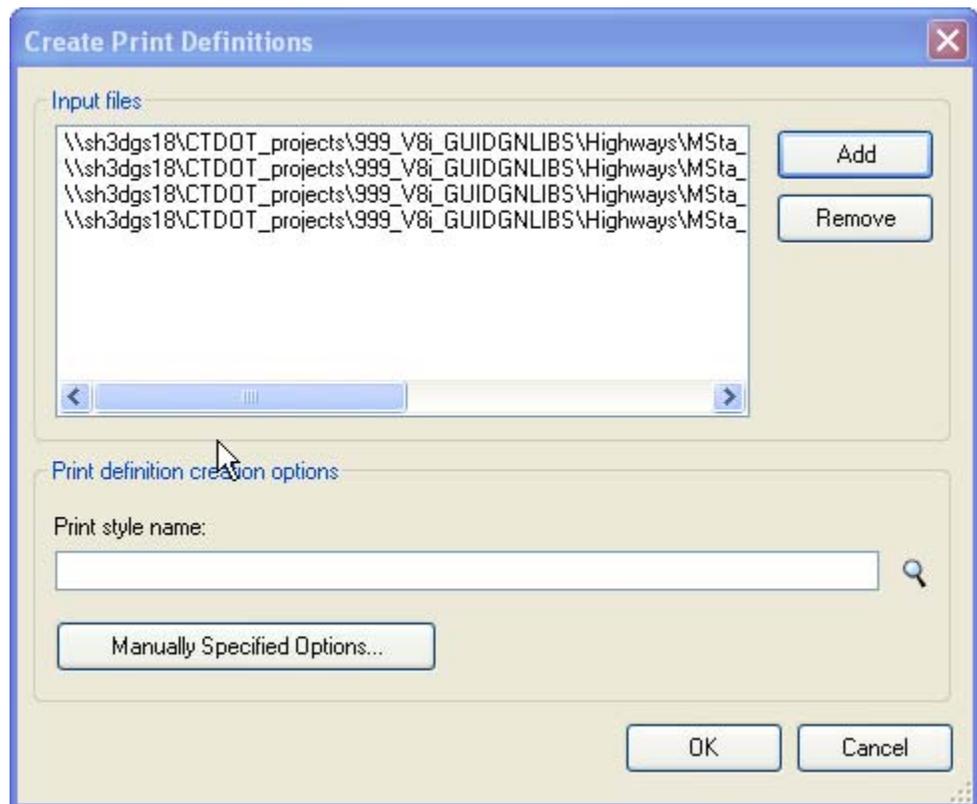


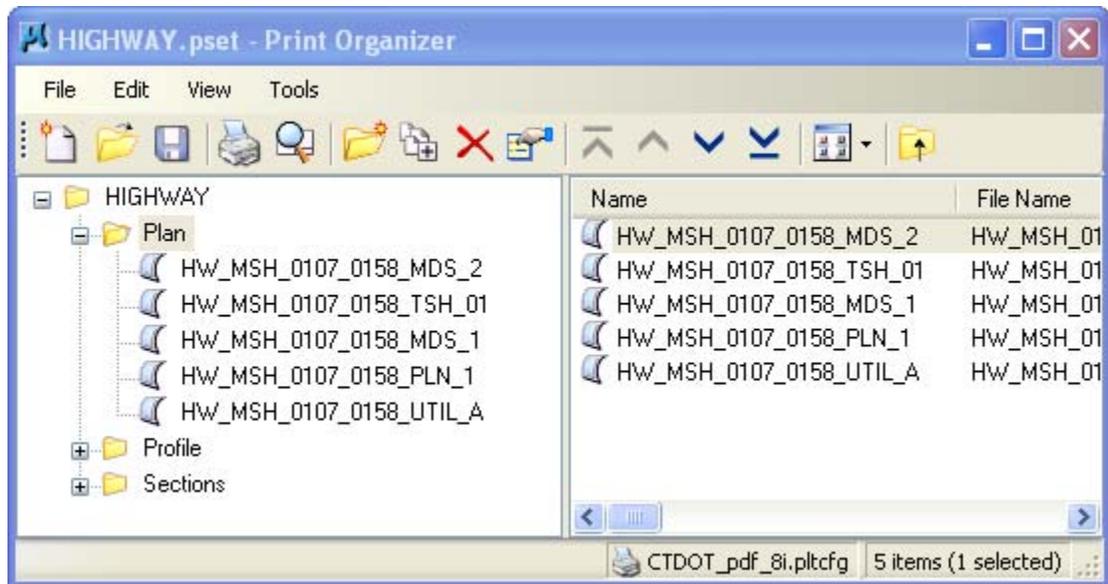
Steps 8-10 show how to populate the folders.

8. Click on the folder that is to be populated.
9. Click on the Add files icon (Note: If your toolbar is not displayed, go to View and click on Toolbar).



10. In the Create Print Definitions dialog box click the add button, browse to the file location, select the files to be added and click done. There is no need to select a print style name; it automatically defaults to the correct one.
11. Click OK

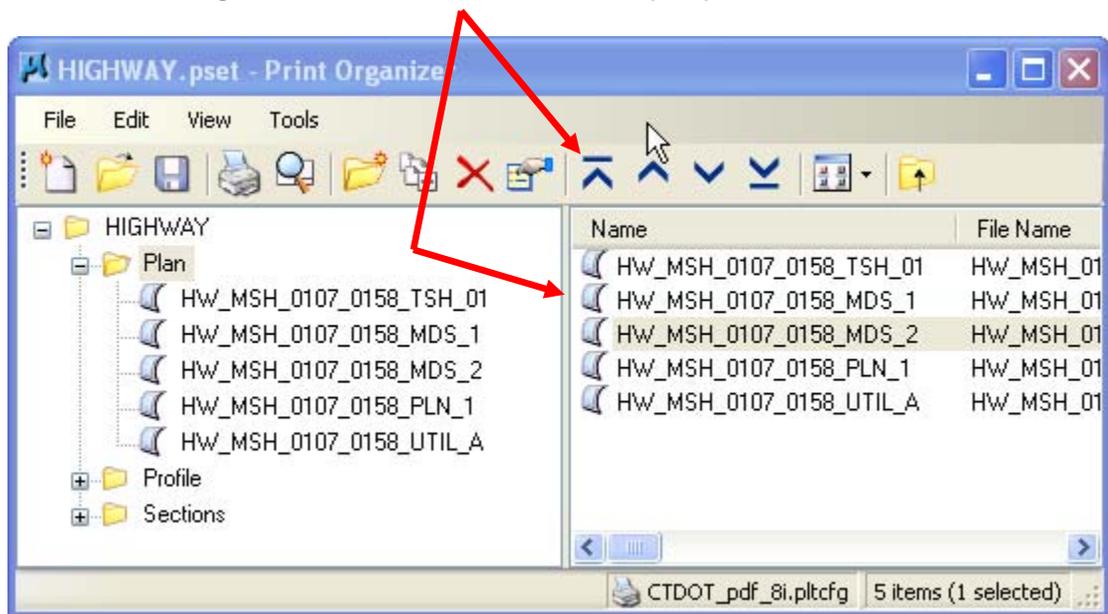




The files must be placed in the correct order before publishing.

12. Select the file that needs to be moved (right column).

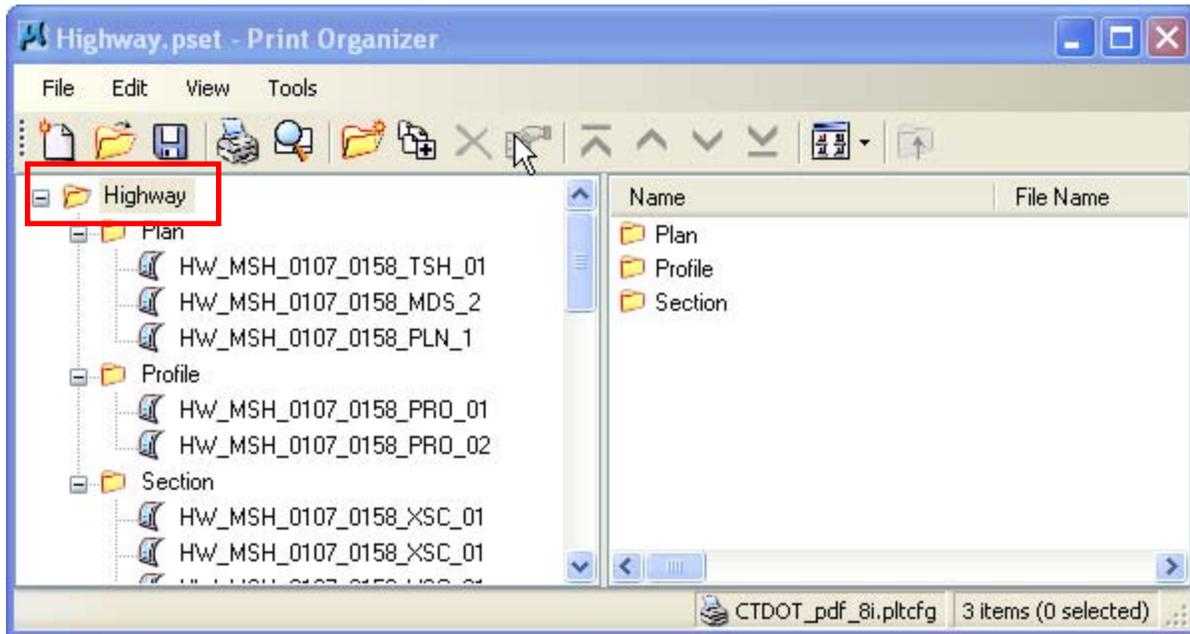
13. Using the arrows move the file to top, up, down, or to bottom.



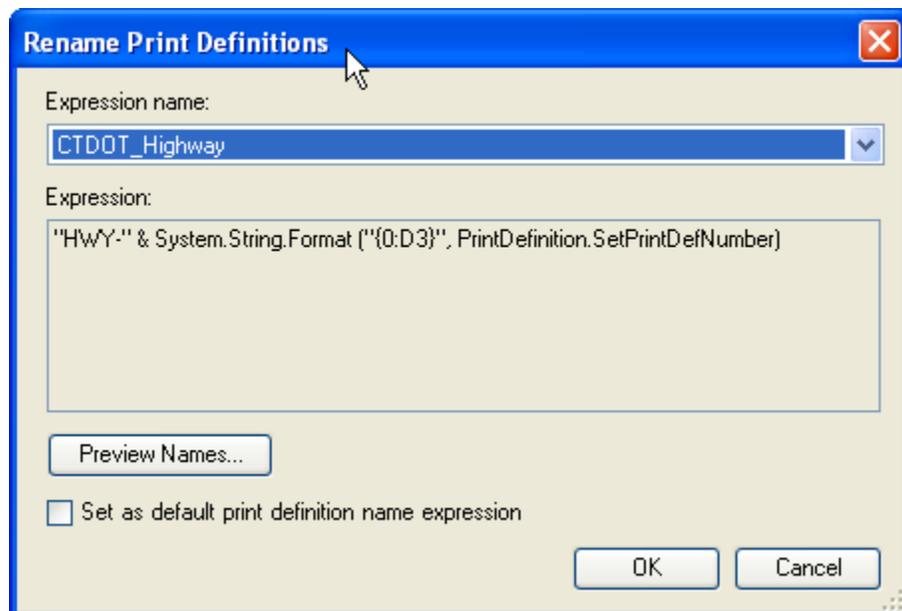
Repeat steps 8-13 for each subfolder.

After the files are arranged in the proper order they must be renamed.

14. Right click on the main folder, in this example the main folder is the highway folder, and select the "Rename" option.

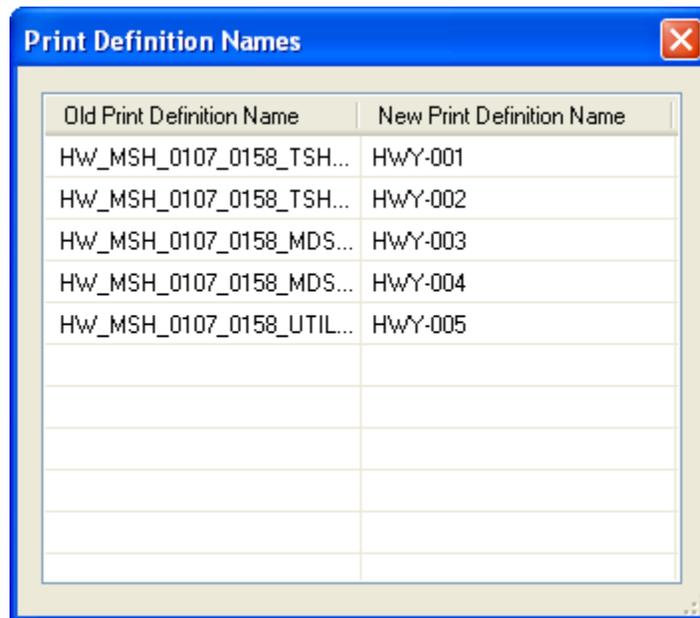


The Rename Print Definitions dialog box will open.



Click the drop down menu and choose the option that corresponds to your discipline in this example the – "CTDOT_Highway" option is selected.

15. Click on the Preview Names button to view the New Print Definition Name.

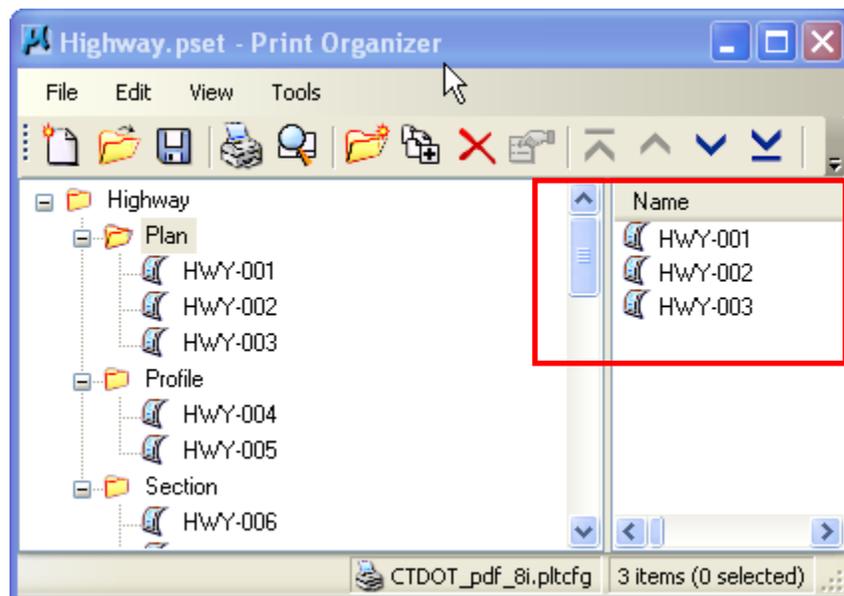


The image shows a dialog box titled "Print Definition Names" with a close button in the top right corner. It contains a table with two columns: "Old Print Definition Name" and "New Print Definition Name". The table lists five rows of data, showing the mapping from old names to new names.

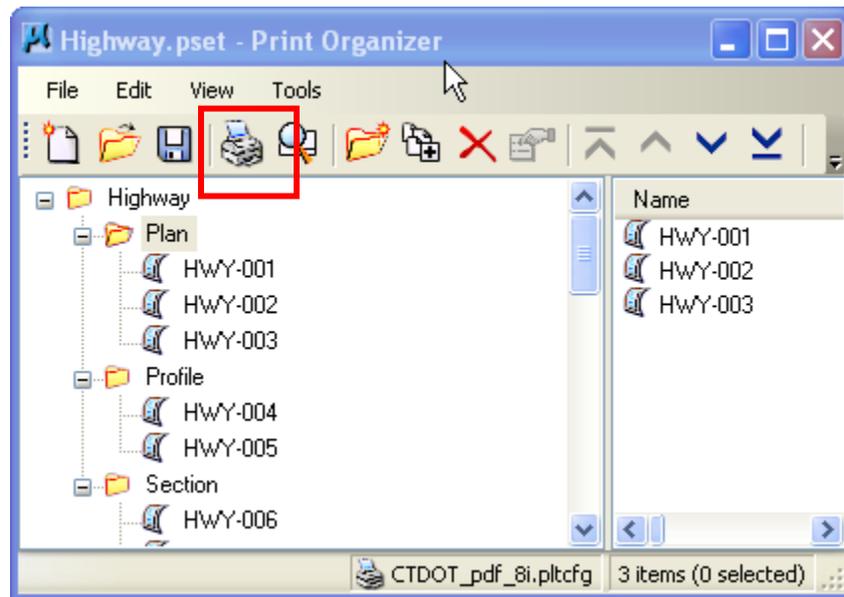
Old Print Definition Name	New Print Definition Name
HW_MSH_0107_0158_TSH...	HWY-001
HW_MSH_0107_0158_TSH...	HWY-002
HW_MSH_0107_0158_MDS...	HWY-003
HW_MSH_0107_0158_MDS...	HWY-004
HW_MSH_0107_0158_UTIL...	HWY-005

16. Click OK

Notice the file names have been changed to the appropriate drawing number.



17. Click the Print Icon



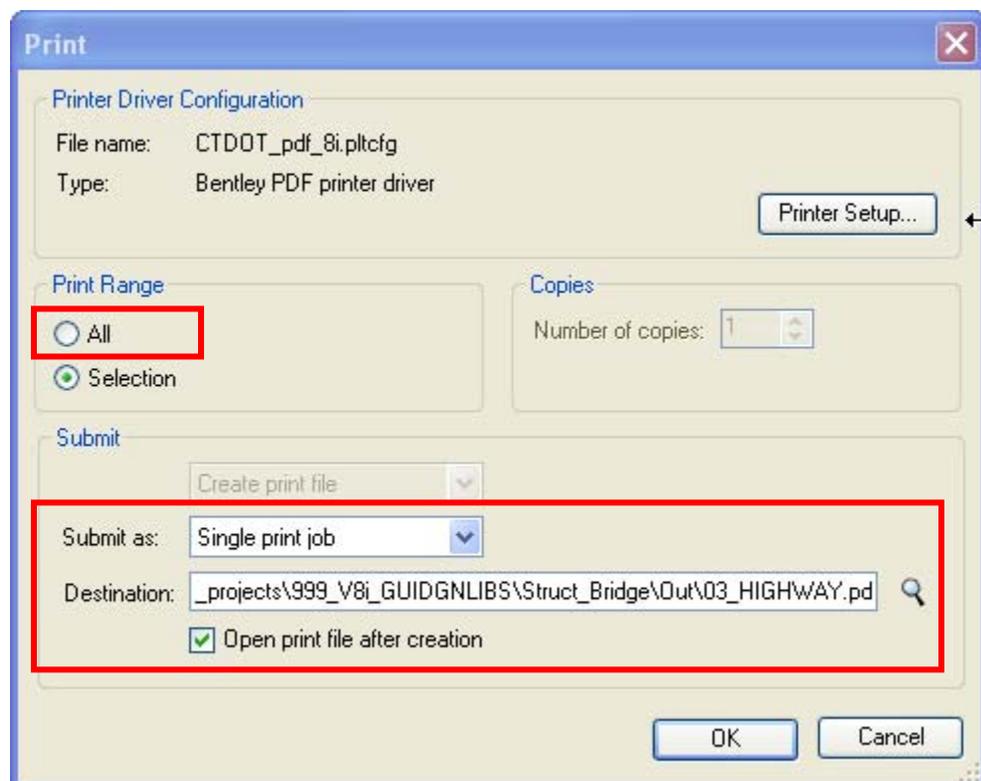
18. Change the print range to all.

19. Change submit as: to Single Print Job

20. Browse to save destination. File should be saved in the root of the disciplines sub folder within the project container, see below for naming conventions.

21. Check on the Open Print File After Creation

22. Click OK



The PDF file, created in step 22, may now be printed to paper, or mylar.

If the project is digital, the PDF set shall follow the below naming convention.

File Names:

03_Highway.pdf
04_Traffic.pdf
05_Structures.pdf

File Names - Facility Projects:

03_Civil.pdf
04_Architectural.pdf
05_Structural.pdf
06_Plumbing.pdf
07_Mechanical.pdf
08_Electrical.pdf
09_Environmental.pdf
11_Salt Shed.pdf

For more on PDF file Naming Conventions, and on how to use a PDF file in a digital project, see the [Digital Submission Procedures Guide:](#)

1.2 Single Contract Sheet Model

Standard Sizes:

36"x24" 2006 DDE

34"x22" 2007 DDE

1. Open the MicroStation Sheet Model to publish. Must contain a transient shape and border.
2. From the drop down menu "*CTDOT_07_Uilities*" choose the option "*PDF Publishing>Active Model>Contract Sheet (Sheet)>PDF_BW or PDF_Color*"

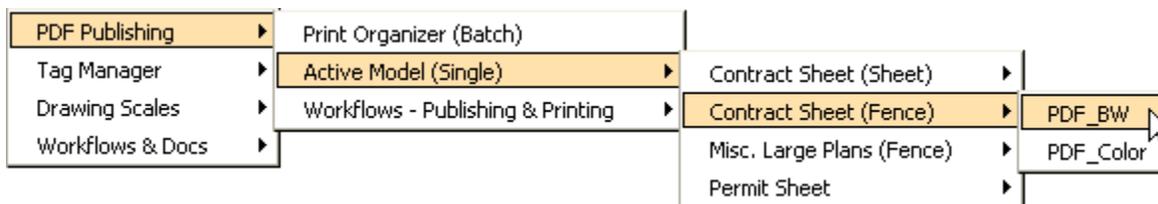


No print dialog boxes will be visible; all settings are automatically set behind the scene.

The PDF is automatically published, and is saved to the local C: Drive (C:\Plots folder). Every time a single PDF is published more than once from the same file the original copy located in the C: Plots folder will automatically be overwritten.

The newly published PDF will automatically open in adobe acrobat, allowing a review of the sheet prior to printing to hard copy.

The option Contract Sheet (Fence)>PDF_BW or PDF_Color" shall be used for publishing single cross sections.



3. Review the opened PDF in Adobe Acrobat.
4. If okay, Print PDF to plotter. "[Printing PDF Contract Sheets Guide](#)".
5. File may be saved to the Project Container by using the save as option in Adobe Acrobat.

After clicking the save button the PDF document will automatically open allowing for review.

1.3 Miscellaneous Sizes

Miscellaneous PDF sizes are any sizes other than Contract Plan Standard Sheet Sizes.

Available Sizes:

Permit Plates

11"x17", 8.5"x11"

Large Plans

35" Wide by 36"-144" Long in 12" Increments

41" Wide by 36"-144" Long in 12" Increments

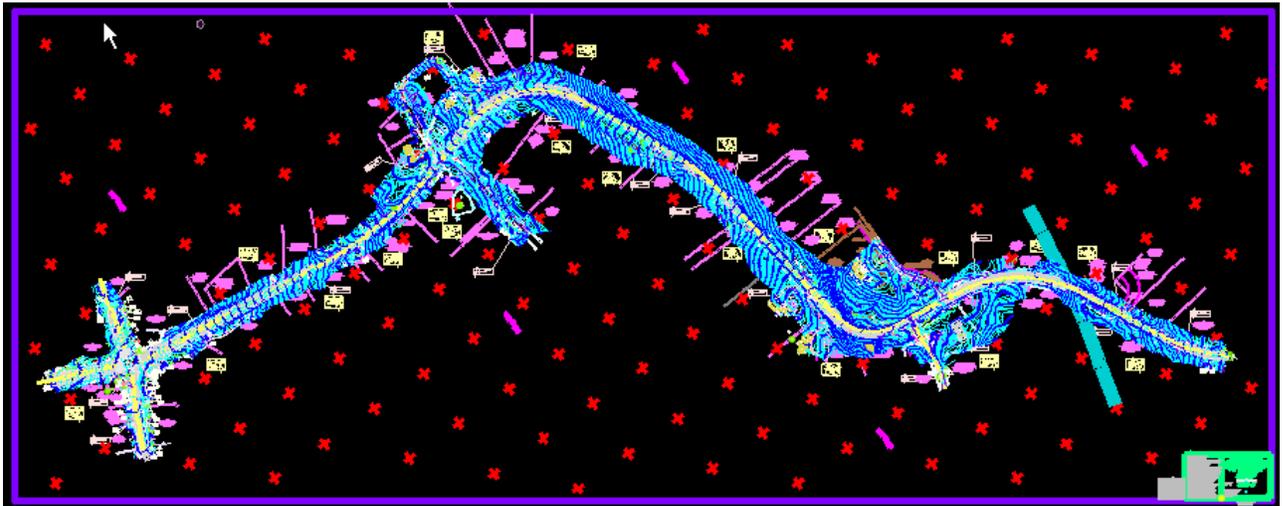
Random Fence

For plans longer than 144" please see AEC Applications.

1.3.1 Large Plans (using border template)

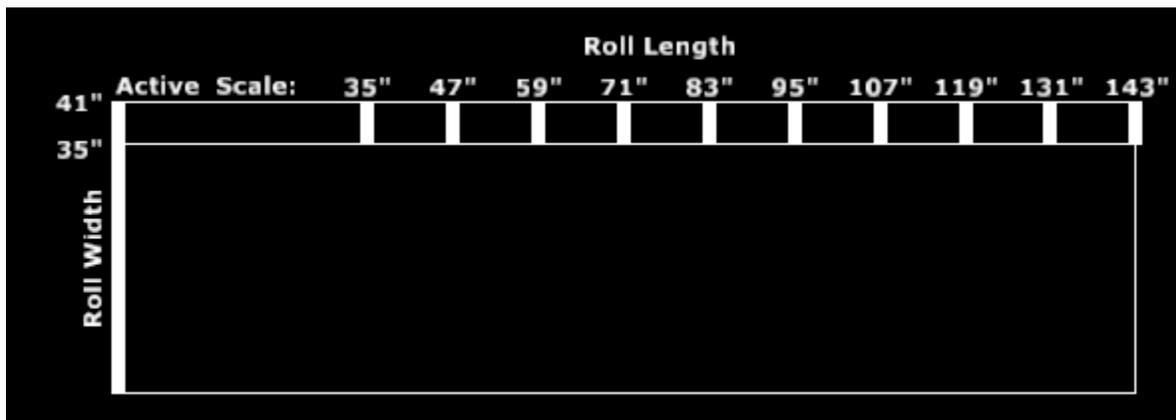
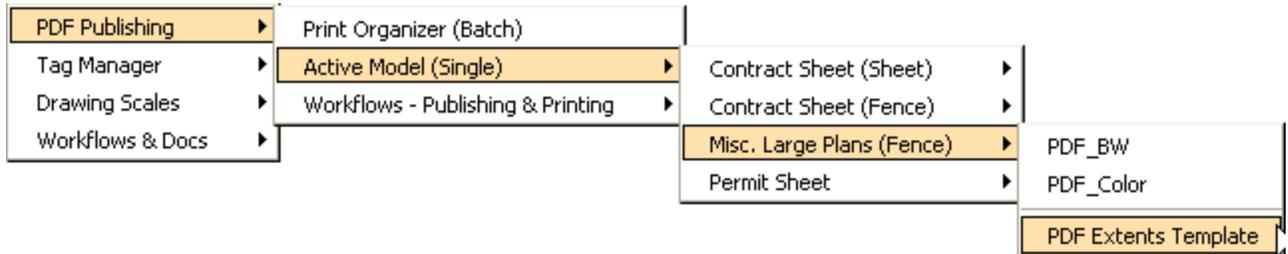
1. Open MicroStation file

1" = 40'



The following publishing extents template was created for both 35" and 41" wide PDF files. This template shall be placed over the design file content to delineate the publishing extents. A 35"x47" PDF will print to a hard copy 36"x48" paper size, yielding a ½" margin.

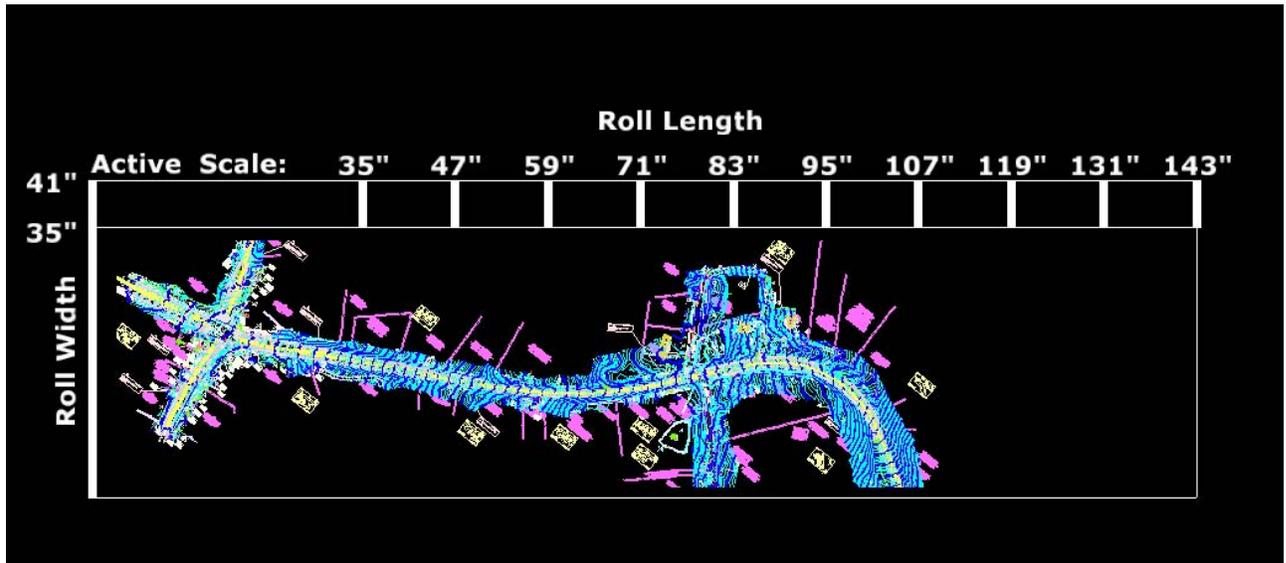
- From the drop down menu "CTDOT_07_Uilities" choose the option "PDF Publishing>Active Model>Misc. Large Plans (Fence)>PDF Extents Template"



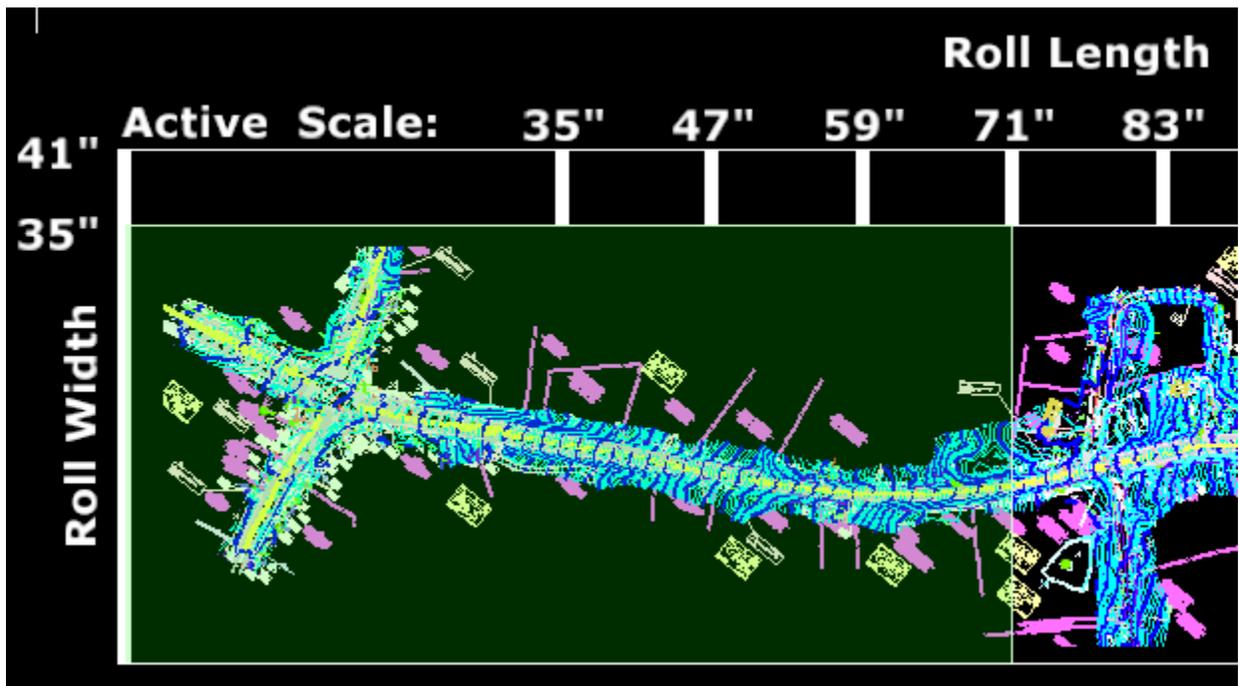
The template elements possess construction attributes therefore they will not print. Template was designed to work on design files that are 40 scale if placed with the cell scale set to 1.0. The cell scale may be adjusted by changing the cell scale.

Note: The Constructions tab under Settings>View Attributes must be toggled on to see any construction elements.

- Left click to place the template at its origin (left bottom corner), rotate if necessary and reset.



- Place a block fence, by starting in the lower left hand corner of the template, and closing on the bottom or top of any one of the tick marks provided (top yields 41"W, bottom yield 35"W). In this example the bottom of the 71" L tick mark was selected.

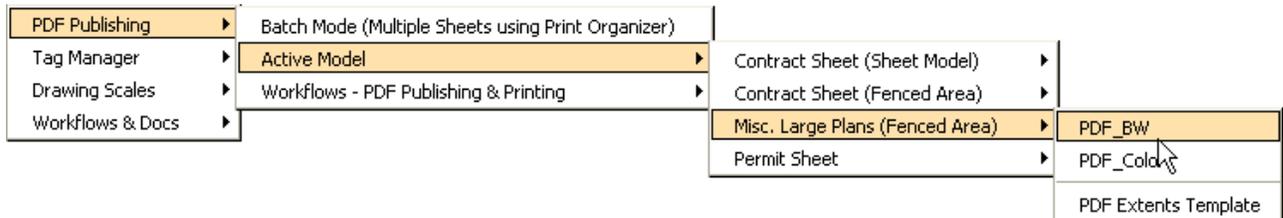


Note:

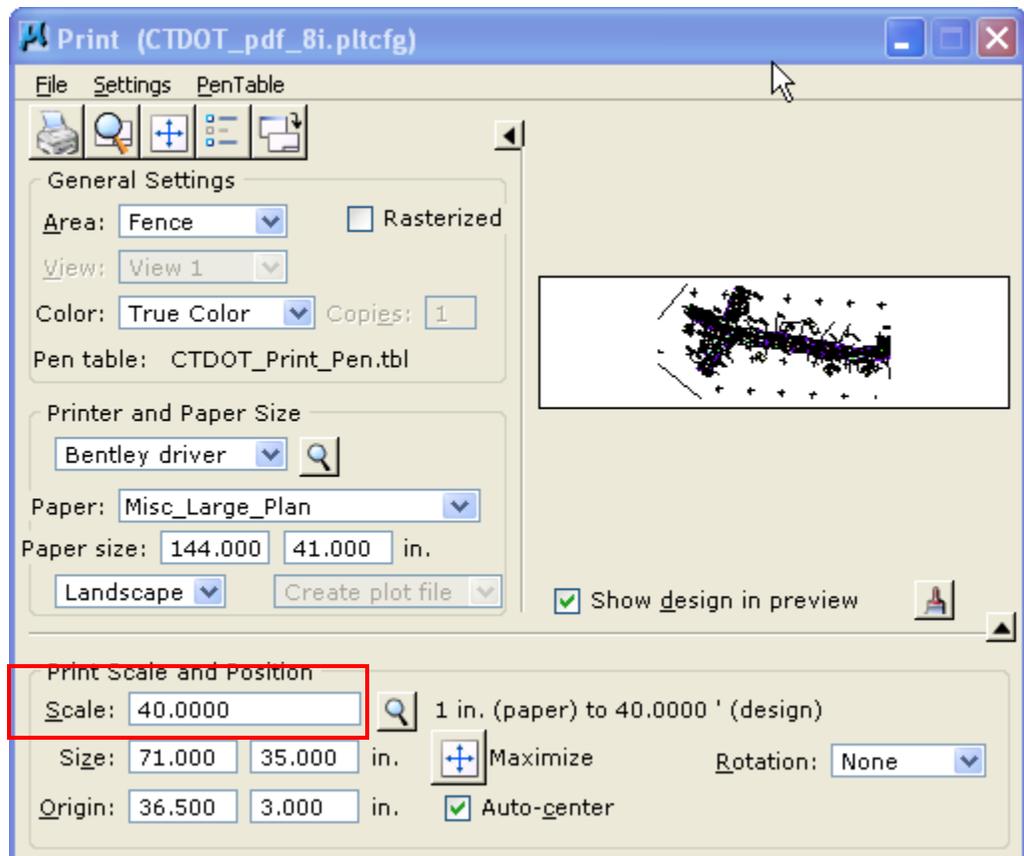
In State Design the new BW Plotter (TDS 700) is limited to a 36" wide roll of paper, and the Color Plotter (Colorwave 600) is limited to a 42" wide roll. Therefore PDF files that are 41" wide can only be printed on the color plotter, and 35" wide PDF files may be plotted on either the Color or the BW Plotters.

After placing the template and the fence follow steps 5-10

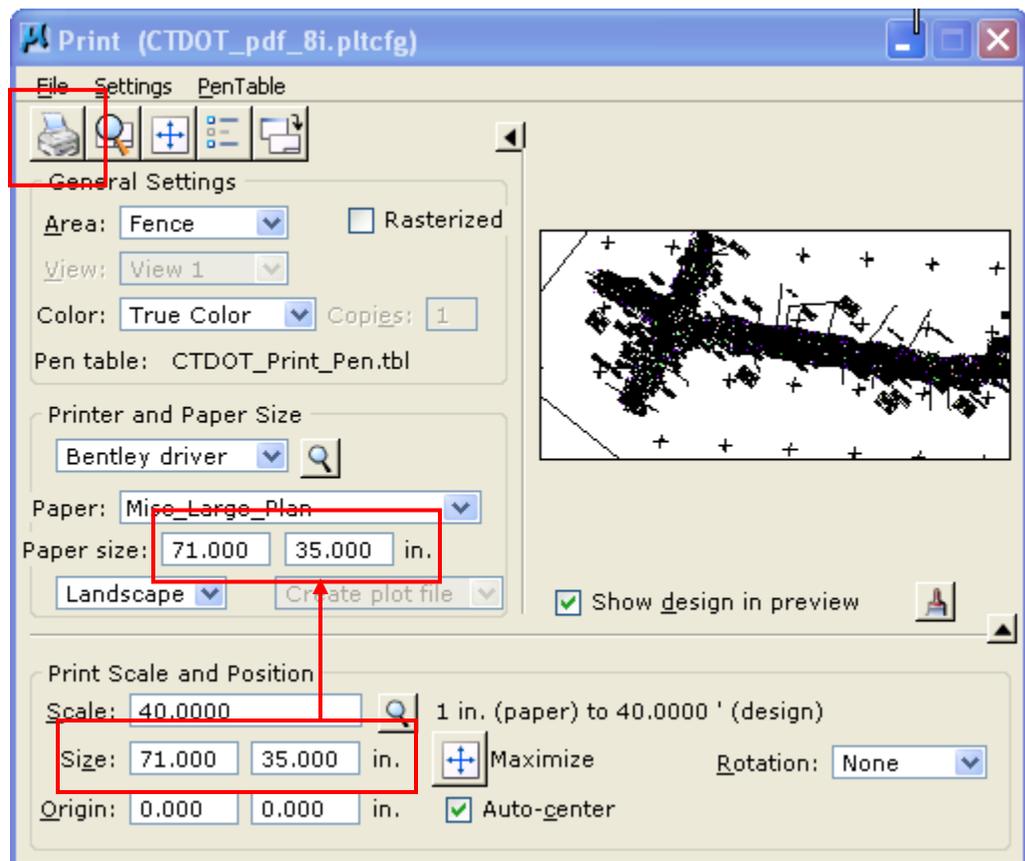
5. From the drop down menu "CTDOT_07_Uilities" choose the option "PDF Publishing>Active Model>Misc. Large Plans>PDF_BW or PDF_Color".



6. The scale dialog box should match the drawings active scale (defaults to 40). In this example there is no need to change it.



7. Copy the Plot Size dimensions to the paper size dimensions.



8. Click the print icon

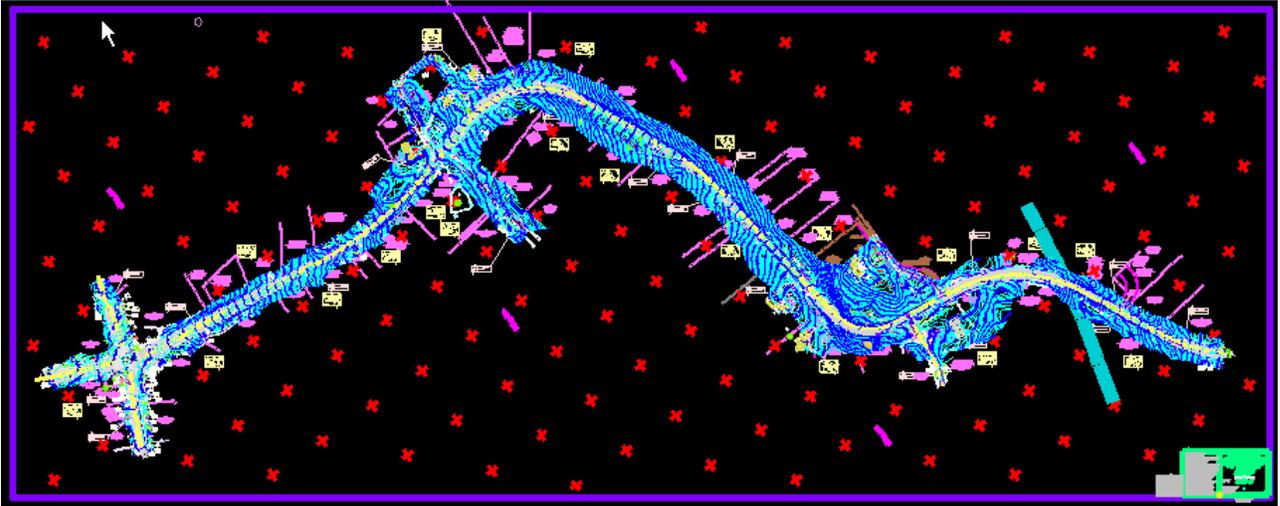
9. Choose the File Name and Save Location (Project Container).

10. File will automatically open for review or printing

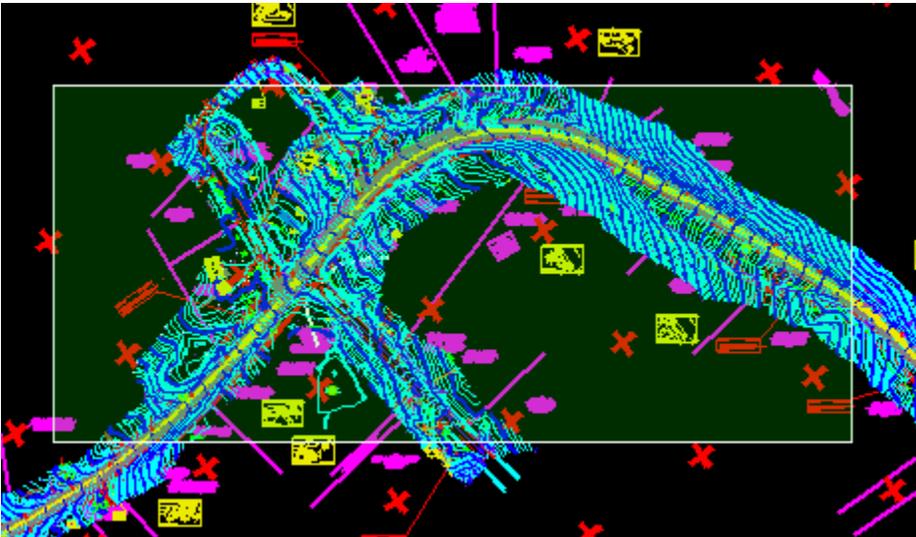
1.3.2 Large Plans (using miscellaneous fence NOT TO SCALE)

1. Open MicroStation file

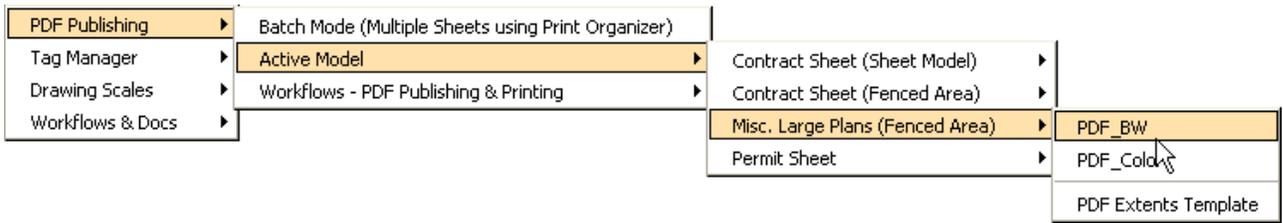
1"= 40'



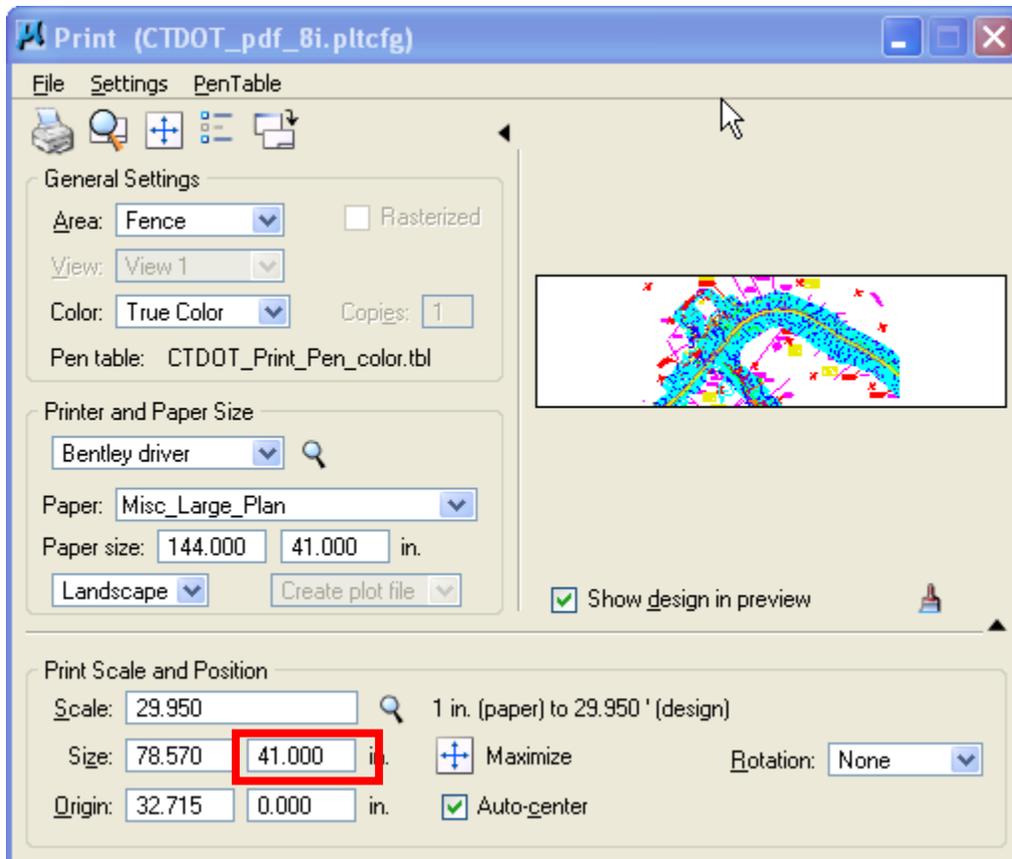
2. Place fence defining publishing extents.



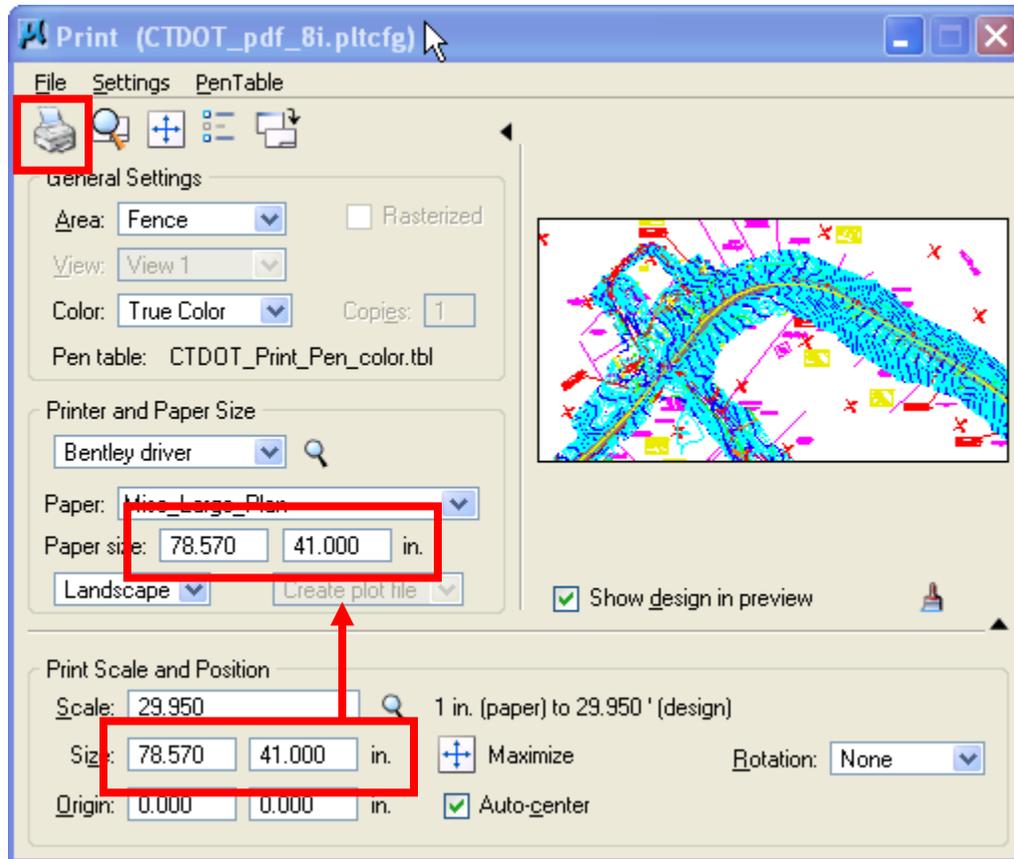
- From the drop down menu "CTDOT_07_Uilities" choose the option "PDF Publishing>Active Model>Misc. Large Plans>PDF_BW or PDF_Color".



- Key in the smallest dimension needed in the Print Scale Position. In this example I used 41, because I want to print to the largest available paper which is 42" wide. You could also publish to a specific scale, however you will always be constrained by paper size. See following example



5. Copy both print scale size dimensions to the paper size dimensions.

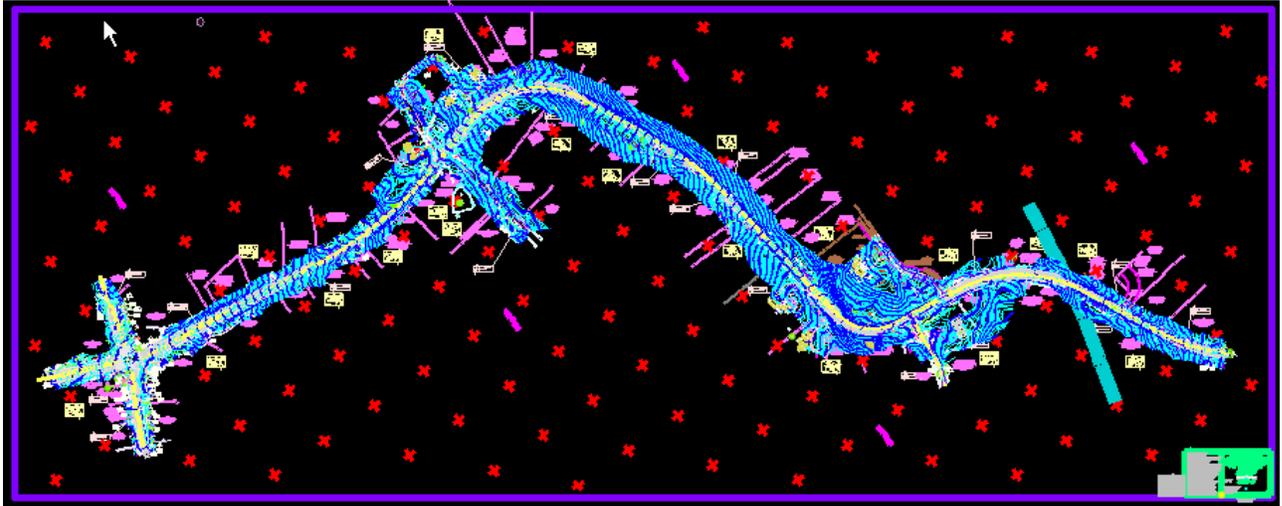


6. Click print icon
7. Choose the File Name and Save Location (Project Container).
8. File will automatically open for review or printing

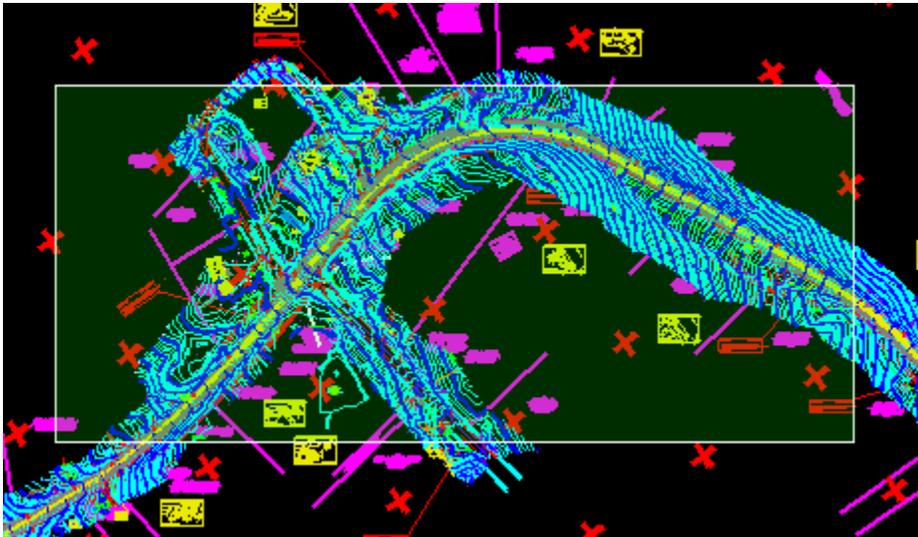
1.3.3 Large Plans (using miscellaneous fence (TO SCALE))

9. Open MicroStation file

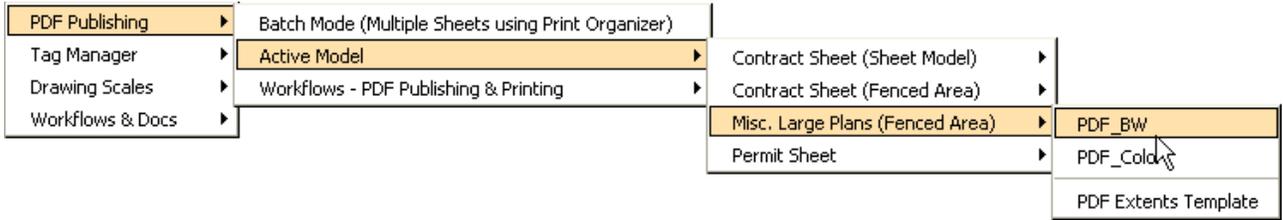
1" = 40'



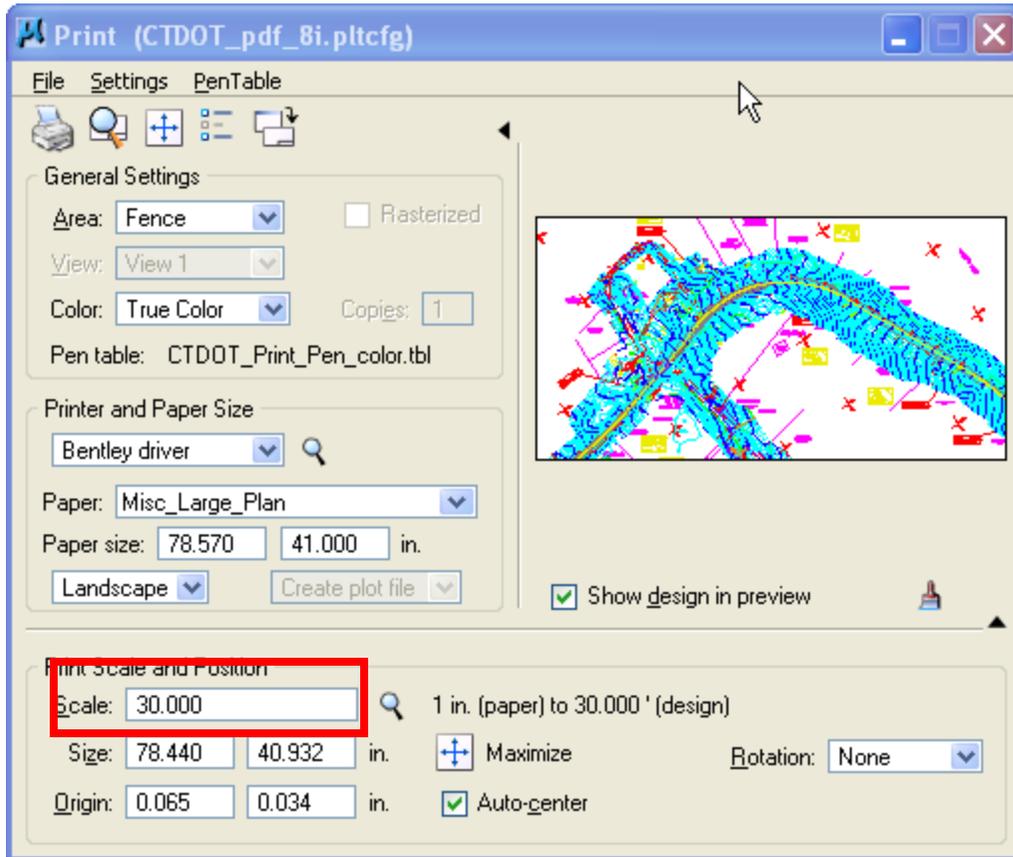
10. Place fence defining publishing extents.



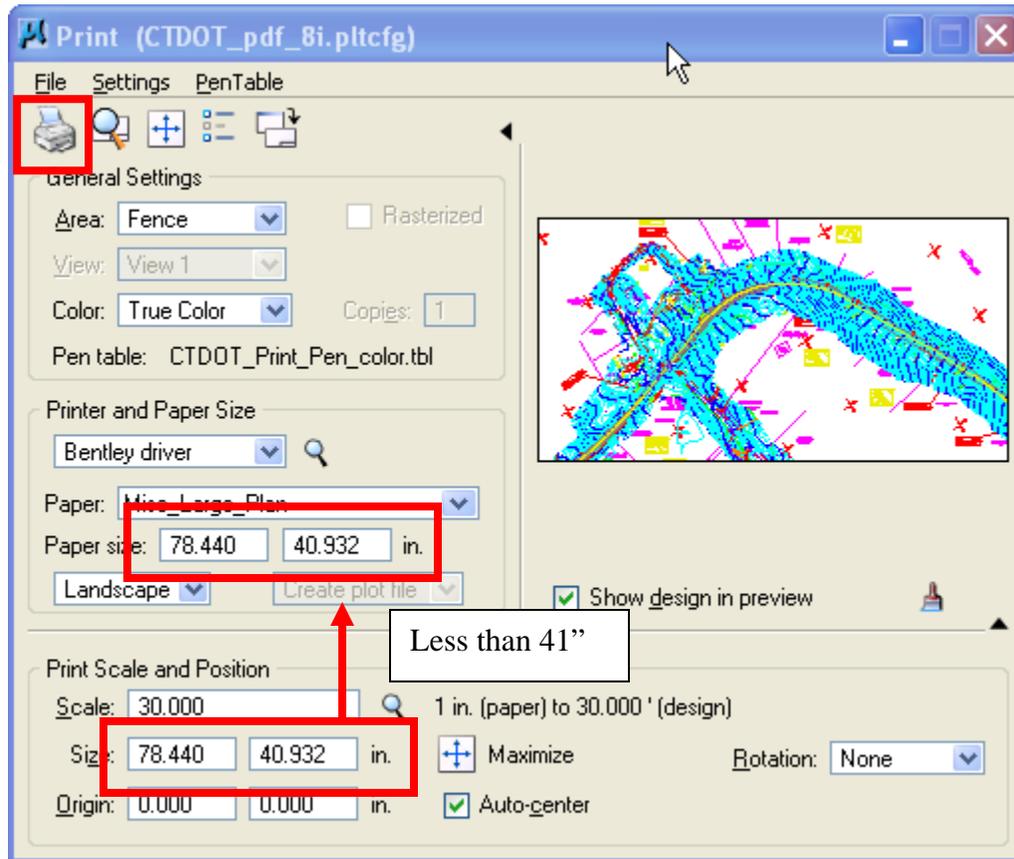
11. From the drop down menu “CTDOT_07_Uilities” choose the option “PDF Publishing>Active Model>Misc. Large Plans>PDF_BW or PDF_Color”.



12. Key in a scale value that yields a Print Scale size less than 41. In this example I used 30. You will always be constrained by paper size.



13. Copy both print scale size dimensions to the paper size dimensions.



14. Click print icon

15. Choose the File Name and Save Location (Project Container).

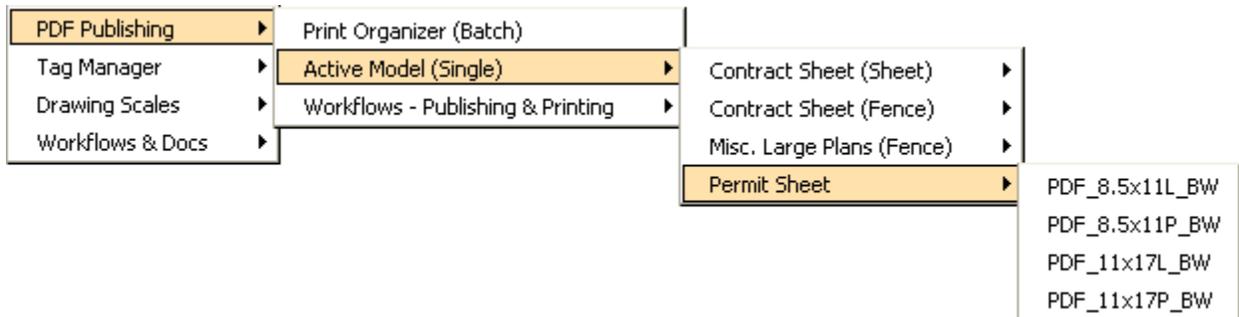
16. File will automatically open for review or printing

1.3.4 Permit Plates

Note:

The permit border transient shape sizes have been changed and will automatically be loaded in any project container created after November, 2009. The new sizes are true 8.5"x11", and 11"x17" which are larger than the plate borders. The permit transient sheets shall be centered on the permit border.

1. Open the MicroStation Sheet Model to publish. Must contain transient shape and permit border.
2. From the drop down menu "CTDOT_07_Uilities" choose the option "PDF Publishing>Active Model>Permit Sheet>any available size.

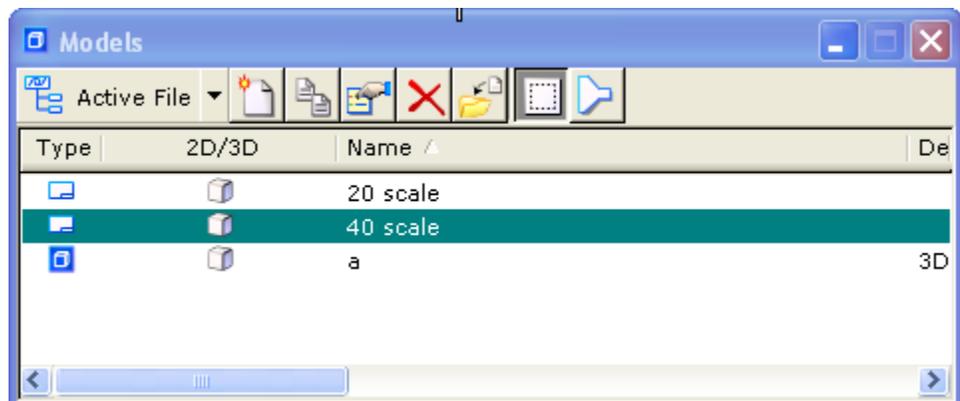


The PDF will automatically be published to your local C: Drive (C:\Plots folder), and will also automatically overwrite any previous versions of the same file. During this operation no print dialog boxes will be visible; all settings are automatically set behind the scene.

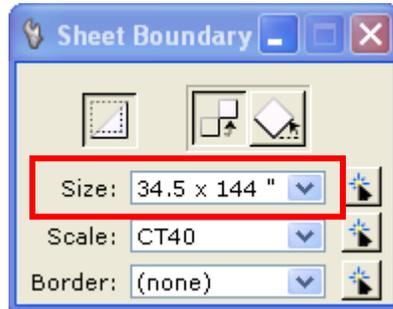
The newly published PDF will automatically open in adobe acrobat, allowing for a review of the sheet prior to printing to hard copy.

For project containers older than November, 2009:

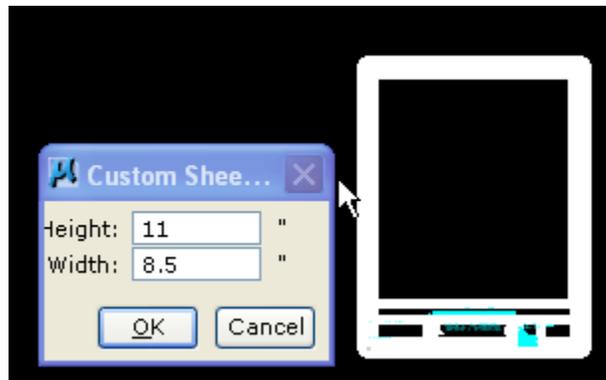
1. Click on the "Define Sheet Boundry" Icon located in the models dialog box.



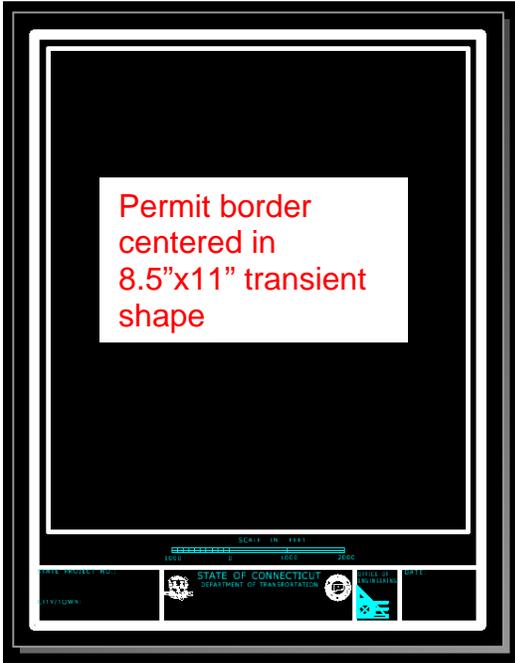
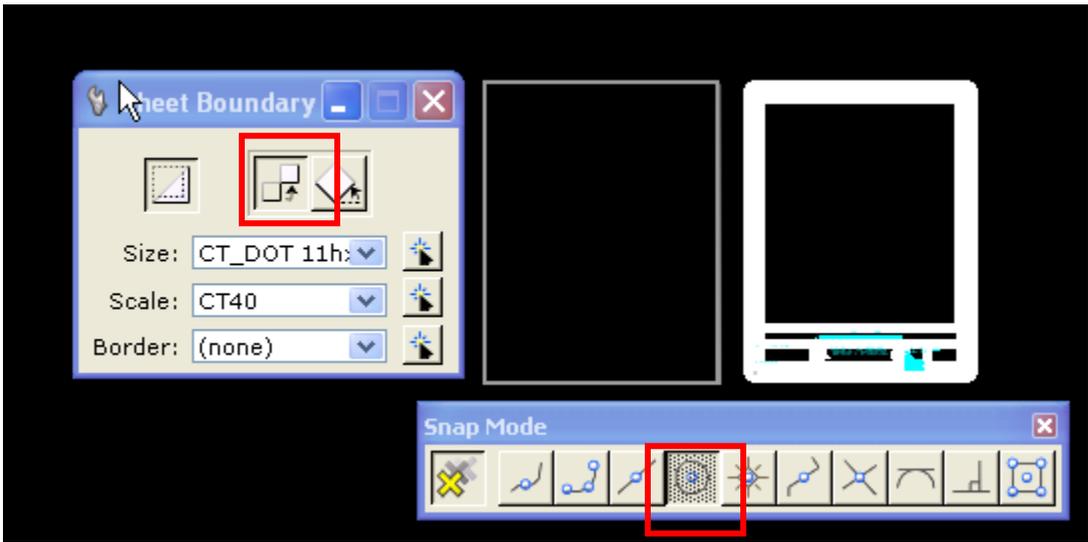
2. From the size drop down menu choose the custom option.



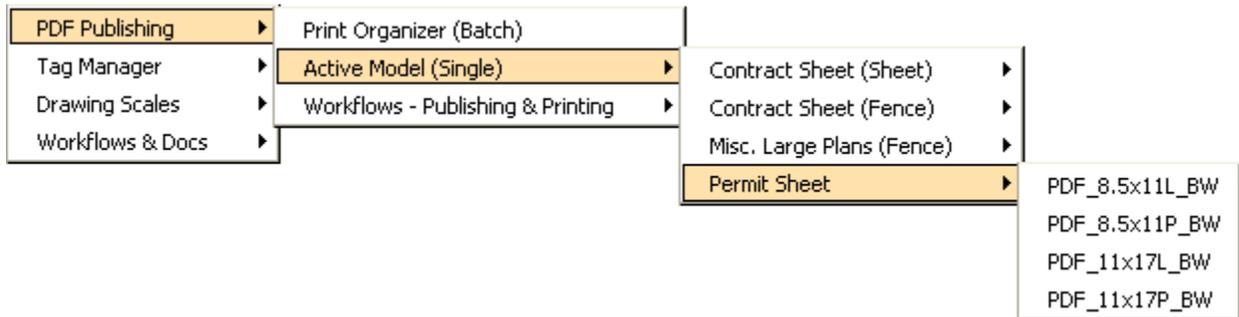
3. For this example (8.5"x11" Portrate) key in exact paper sizes, 11"x8.5"



4. Place the sheet, and using the center snap move the sheet from its center to the center of the permit border.



- From the drop down menu “CTDOT_07_Uilities” choose the option “PDF Publishing>Active Model>Permit Sheet>any available size. This example 8.5”x11” Portrait.



The PDF will automatically be published to your local C: Drive (C:\Plots), and will also automatically overwrite any previous versions of the same file. During this operation no print dialog boxes will be visible; all settings are automatically set behind the scene.

The newly published PDF will automatically open in adobe acrobat, allowing a review of the sheet prior to printing to hard copy.